

iN2015 < IMAGINE YOUR WORLD

FROM INTEGRATING
SERVICES TO INTEGRATING
GOVERNMENT

Report by the iGov2010
Project Steering Committee

Singapore: An Intelligent Nation, a Global City,
powered by Infocomm



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Preface

The e-Government journey is a long, tedious but rewarding one. For Singapore, the journey started 25 years ago in 1981 under the “Civil Service Computerisation Programme”. The focus then was on automating the internal operations of the Government. Many mainframe applications were developed. Some of the world-class systems like TradeNet were also implemented during that time, in partnership with the private sector.

The late 1990s saw the convergence of information technology and telecommunications which transformed the concept of service delivery. This paved the way for the launch of the two e-Government Action Plans (eGAP); the first in year 2000 and the second in 2003. Under eGAP, a total of 1,600 public services were made available online. Today, Singapore leads in e-Government globally, and infocomm continues to bring about exciting changes to the way the Government serves and interacts with its constituents.

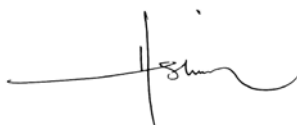
Capitalising on our strong foundation, we are now moving on to the next phase of our journey – to be an “Integrated Government” (iGov) that will deliver even higher level of service that will delight our customers and connect our citizens.

Under this phase, we will focus on reviewing our current business and operating models, and to make changes that will significantly raise our level of service to customers, by leveraging infocomm technologies and best practices.

Our efforts in the area of engaging our citizens via the online channel complement the larger goal of supporting active citizenry and building a common national identity.

The Government sector plays an important role in the nation’s economic competitiveness. We will work with the private sector to jointly transform the various industry sectors, so as to create a pro-business environment which will attract investors to Singapore. We will showcase and promote Singapore as a centre of excellence for iGov solutions.

iGov2010 seeks to move the Singapore Government with the times and with the evolution of Internet. This report provides an insight into the action plan to achieve our vision to be an iGov that delights customers and connects citizens through infocomm.



Mr Lim Hup Seng

Chairman, iGov2010 Project Steering Committee
Deputy Secretary (Performance)
Ministry of Finance

iGov2010 Project Steering Committee (Sep 05 – Mar 06)

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Executive Summary

The Singapore Government has made huge strides in the use of infocomm technology to help carry out our functions. Our groundbreaking efforts in e-solutions are recognised worldwide. However, we see their implementation not as an end in itself but the foundation to help us realise our goals to reach out and serve our citizens and customers well.

Now, we are poised to make the next step, this time to a level where all the various agencies work together closely and to serve seamlessly – as one Government.

Such a major development will make it possible to reap new synergies and exploit fresh opportunities. It would offer the Government the leeway to create new value for its services. To encourage every citizen to play a role by involving them in policy development. To provide information in a form and manner that would make it easier for citizens to communicate their needs and help the Government satisfy them. To become an intrinsic part of their lives.

It is a step that needs to be taken in consideration of a more educated citizenry. Singaporeans now have higher expectations of how a Government should fulfil its duties. The country is facing increased competition from other economies in attracting global investments. Yet at the same time, there is a compelling need for the Government to do more with less.

The Government sees the use of technology as a strategic avenue that can lead to ways of overcoming the challenges it faces.

Through iGov2010, the Government aims to achieve its vision to be an Integrated Government that delights customers and connects citizens through infocomm. The key thrusts of iGov2010 are:

- **Increasing Reach and Richness of e-Services**

This thrust seeks to enhance the quality of e-services (“richness”) and increase their adoption and usage (“reach”). The objective is to provide customers with quality Government e-services that are convenient and accessible.

- **Increasing Citizens’ Mindshare in e-Engagement**

This thrust seeks to provide citizens with high quality Government information and the opportunity to be active stakeholders in the public policy formulation and feedback process.

- **Enhancing Capacity and Synergy in Government**

This thrust seeks to enhance the capacities of the Government and public officers through innovative use of infocomm. It also seeks to achieve organisational transformation, cost efficiencies and synergies in the Government through sharing of processes, data and systems.

- **Enhancing National Competitive Advantage**

This thrust will focus on facilitating the transformation of economic sectors in Singapore as well as the infocomm industry. It seeks to increase the nation’s economic competitiveness by fostering a pro-business environment in Singapore and partnering the private sector in innovative iGov2010 projects.

CHAPTER 1
IMAGINE < GOVERNMENT
LANDSCAPE IN 2015

In 2015, Singapore celebrates 50 years of nation-building and a new chapter of service excellence in the Singapore Government's history with infocomm.

Two distinct trends have converged to usher in this new era. One is the extensive backend integration between public agencies and private enterprises. The other is the emergence of sentient devices capable of communicating with one another. Wearable computing machines have created a cocoon of these sentient devices around the individual, ever-alert and ready to be of service at all times.

Both trends have come together in a concerted effort to better serve the individual over the last decade. This bipartite alliance has ushered in new capabilities that have allowed Singapore to redefine Government-customer interactions.

In this new paradigm of service, customers need only to give the go-ahead to begin any interactive process. Once authorisation is given, information will be pulled directly from the individual's personal devices allowing transactions to be completed without further inputs. This level of heightened convenience was unthinkable just 10 years earlier.

Indeed, the Government has never been so personal. It seems like the Government is always there, ready to serve individual needs but rarely something people think about, because of a lesser need for interactions. Yet, when a customer needs a service, he has only to wish it, and the Government delivers, like a genie.

Transforming the Public Sector

Empowered by infocomm, the Singapore Government is a dynamic, innovative and forward-looking Government that works effectively as a single integrated entity.

Public agencies raise the bar of organisational efficiency by integrating and streamlining their backend processes and systems. As a result, the Government is able to channel more resources to developing new programmes and policies that better serve its customers and citizens.

New synergies arise in Singapore's Integrated Government, which is constantly on the lookout for opportunities to improve services and achieve greater efficiencies.

Innovative use of infocomm is prevalent at all levels of the Government and transforms its services, which are organised around its customers and citizens. Collaborations between agencies create new capabilities for the public sector, allowing them to serve their customers and citizens in creative ways.

Delighting Customers

The understanding of customers' needs is a top priority. Services are tailored to each unique segment of customers. On top of that, the Government focuses on each user's experience, making sure that it is satisfying in every instance.

Relationship-building technologies strengthen customer-centric service delivery. The Government can intelligently predict each customer's needs and make useful recommendations to him without compromising his privacy. A whole new suite of location-based services that leverage widely-deployed sensor networks pushes the frontier of what is possible in service delivery.

The public and private sectors work closely together to deliver services that centre around the customer, heralding a new convenience.

The wireless broadband network available island-wide means a customer can interact with the Government anywhere with his mobile devices. It seems unthinkable that 10 years ago there was no virtual "Government service network", ubiquitous, always on and ever-ready to serve.

Not sure how to go about communicating with the Government online? No problem, there are always staff on hand to help make the connection at CitizenConnect Centres in neighbourhood Community Clubs. Access for all is assured.

Connecting Citizens with Government

Interactive online Government channels are available 24/7 and accessible anywhere in the world so citizens can voice their views and provide feedback. Consultations are regularly carried out online on new policies and programmes, and citizens participate actively in shaping these policies and programmes.

Both the Government and citizens have the confidence to engage in robust debate, so as to better appreciate the issues, conceive fresh solutions and open up new spaces.

The Government moves away from being typecast as providing information that is dry and boring. Its online presence is vibrant, compelling and relevant to its different audiences. The wealth of information at a citizen's fingertips allows him to make informed decisions easily and quickly.

Supporting Industry and Enhancing Competitiveness

Businesses place their confidence in a Government who is committed to their success. In an increasingly “flattened” world, geographical distances between continents become irrelevant. Companies face stiff international competition and need to move quickly to seize every new business opportunity.

Understanding this, the Government lives up to its promise to deliver services at Internet speed to help them stay on top of the competition. Registrations and applications are swiftly processed. There is minimum hassle to conduct business.

Infocomm enterprises find the Government to be a partner, one which is keen in helping them grow, and willing to commit significant resources to incubating and nurturing them. The innovative infocomm solutions they jointly develop are used by the Singapore Government, which also helps them market these products and solutions abroad. Riding on the Singapore brand for quality, infocomm enterprises find they can easily take wing internationally.

At the same time, the Government cultivates an environment conducive to conducting business. Public agencies actively take on the role of agents of change, always on the lookout for opportunities to transform the economic sectors. Using infocomm as the catalyst, the Government spearheads innovative projects that give businesses in Singapore a competitive edge.

CHAPTER 2

iGov2010 GOAL

Our vision is to be an Integrated Government (iGov) that delights customers and connects citizens through infocomm.

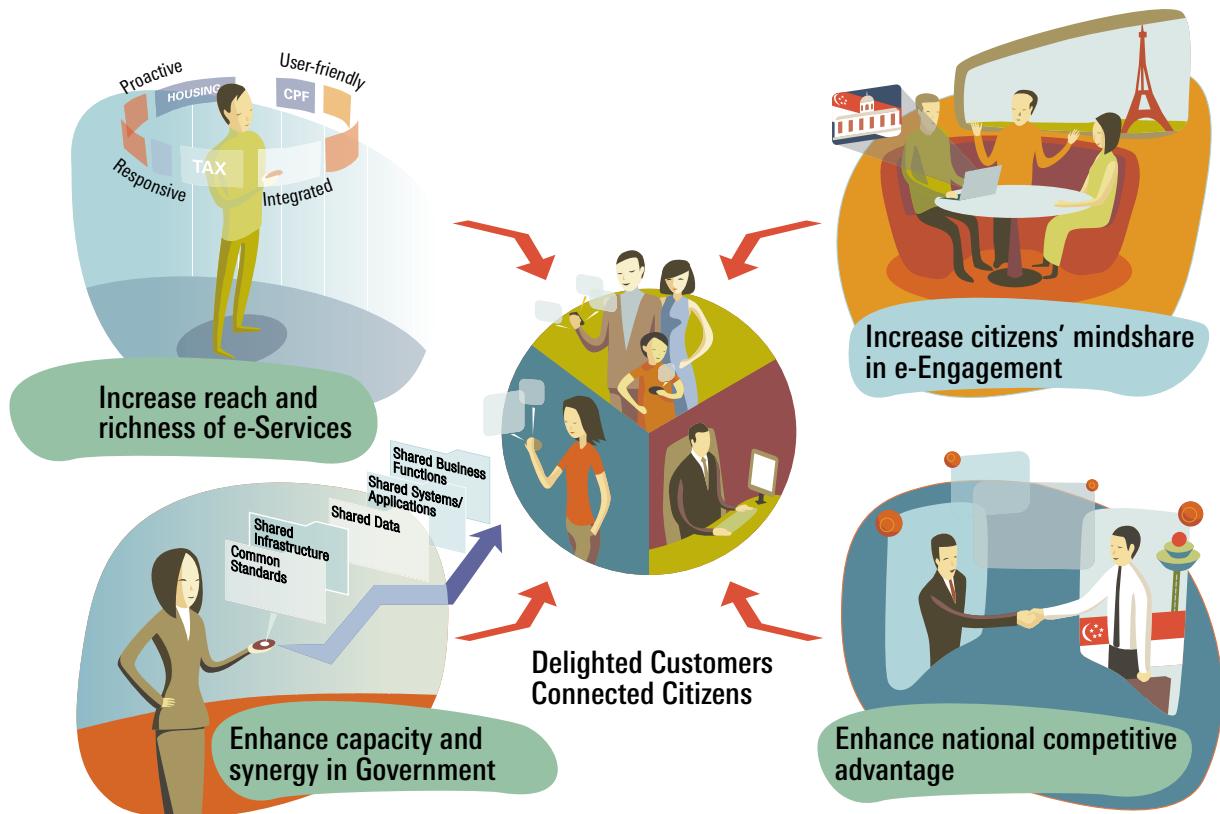
Infocomm will advance relentlessly and quickly, opening new possibilities with each change and development. However while looking ahead to 2015, the Government has defined precise actions for public agencies in the shorter term.

By 2010, we aim to have:

- 8 out of 10 users who are very satisfied with the overall quality of Government e-services;
- 8 out of 10 users who are very satisfied with the level of clarity and usefulness of information published online on Government policies, programmes and initiatives; and
- 9 out of 10 users who will recommend others to transact with the Government through e-services.

iGov2010 Goal:

To be an Integrated Government that delights customers and connects citizens through infocomm



CHAPTER 3
DRIVING FORCES THAT
SHAPE iGov2010

Infocomm Journey in Singapore Government

Singapore's e-Government journey began with the Civil Service Computerisation Programme in the early 1980s. This was conceived to turn the Singapore Government into a world-class user of information technology. It also marked the beginning of computerisation in the public sector that focused on raising the efficiency of internal operations through the automation of traditional work functions.

In the late 1990's, the convergence of information technology and telecommunications transformed the concept of service delivery and led to the launch of two three-year-long e-Government Action Plans. The first ran from 2000 to 2003; the second, which started immediately after that, ends in 2006 (see Annex A for details). The main objective of the first plan was to roll out as many public services online as possible, while the emphasis of the second was to improve the service experience of customers.

We have achieved much over the last 25 years and we are now recognised as one of the leading e-Governments in the world (see Annex B for some of our accolades and key achievements). Having reaped the lower-hanging fruits and achieved what we set out to do, the Government now seeks the next transformational breakthrough with the iGov2010 plan.

However, this breakthrough will not come easy. The Government needs to re-engineer business processes around citizens and customers, public agencies need to work through difficult cross-agency issues and public officers need to develop new capabilities to collaborate on cross-agency initiatives.

Implementing this major change is expected to take until the end of the decade.

Key Drivers and their Implications

When developing the specific strategies for iGov2010, the Government looked at some of the emerging trends and drivers for the next five years.

New Twists to Better Service

As our customers and citizens become more Internet-savvy, they are increasingly exposed to sophisticated commercial online services. Examples of such services provided by privately-run companies are Google for search services, Amazon and eBay for e-commerce and trading, and Wikipedia for the maintenance, development and distribution of free content, much like a free encyclopedia.

These world-class e-services offered by private and non-government entities have gradually become the benchmarks for Government websites and e-services services. If the Singapore Government's e-services do not match private sector offerings, customers are likely to have an adverse perception of Government e-services. This will lead to lower customer satisfaction and reduced usage of the e-services.

The Government has to embrace the new opportunities that technology advances present. One of these is mobile technology, which makes it possible to deliver e-services that are personalised, timely and location-based. Only then can the Government delight customers and connect strongly with citizens to ensure that they continue to use Government e-services and provide feedback to the authorities.

In changing our service mindset, it is also necessary for us to explore how we can use intermediaries or private sector companies to deliver our services more effectively. There has been some attempt to do this. The website OneMotoring.com is an example of public-private collaboration that delivers services to the motorist in a way that the Government is not able to due to our inherent constraint as a regulatory body. This five year-old site now integrates with traffic.smart to provide real-time information on traffic and road conditions. It is the largest one-stop online site for all matters pertaining to motoring and road transport.

Online Medium becoming the Medium of Choice

Infocomm has become an integral part of people's lives. For instance, the Internet has blended into most aspects of everyday life. It is used at work, in schools, in relationships and in communities. It is rapidly changing how people communicate, work and play.

Singaporeans are going online to find information. Instead of using traditional dissemination medium such as newspapers and television broadcasting, an increasing number of young people are relying on online forums, blogs and news aggregators as their primary source of information.

The Internet empowers individuals to take on a different role. In traditional media, the audiences are passive receptors that consume information fed to them. With online media, individuals can choose to become active participants and engage in two-way communication with like-minded individuals online. They can voice their thoughts and express their views on issues of interest to them.

This represents an excellent opportunity for the Government to engage citizens in the policy-making process. It also signals a need to reach out to the growing numbers who prefer the electronic channel as a means for communication, and offers the potential for the Singapore Government to better connect with its citizens who are overseas.

Doing More with Less

There is renewed focus today on improving internal processes and systems, and ultimately how efficiently and effectively the Government operates. For instance, the United States Government has embarked on an extensive programme to re-examine its processes. It is now in various stages of consolidating agencies and implementing shared services in the areas of financial, human resources, grants, health and case management.

The Canadian and Australian Governments have also consolidated the delivery of some services under Service Canada and CentreLink respectively for the same reason.

Like them, the Singapore Government is faced with the need to meet rising expectations with limited resources, and show superior returns from our investments.

There is a need, therefore, for us to refresh our ways of breaking through old mindsets in how information and services should be delivered. This can be done by streamlining Government processes and sharing Government data, systems and services.

The benefits from this approach can help the Government achieve more efficient use of resources and at the same time improve its effectiveness.

Competitive Global Environment

Globalisation has quickened the pace of change significantly, and many countries are reinventing themselves to compete on this new world stage. We face technological competition from regional giants like China, South Korea and Japan. China is rapidly growing in technological development due to technology transfer from multinational companies that entered the Chinese market. This is coupled by significant Government investment in research and efforts in nurturing an economic climate conducive to business growth.

Research shows that globally-competitive economies rely on their technological applications and innovations to boost their economy. The World Economic Forum's Global Competitiveness Report 2005-2006 listed Finland first and the USA second for their technological supremacy and innovations. Singapore was ranked sixth.

To improve its competitiveness as well as that of the region, Singapore needs to use the transformational effect of infocomm and innovation, its linkages with countries in the region, and its reputation and expertise in e-Government.

CHAPTER 4
iGov2010 STRATEGIC
FRAMEWORK

The Singapore Government remains committed in using infocomm as a strategic enabler to better serve its citizens and customers. The five-year iGov2010 plan maps out the thrusts and strategies that will allow it to do so.

Vision	To be an Integrated Government that delights customers and connects citizens through infocomm			
Strategic Thrusts	Increasing Reach & Richness of e-Services	Increasing Citizens' Mindshare in e-Engagement	Enhancing Capacity & Synergy in Government	Enhancing National Competitive Advantage
Strategies	<ul style="list-style-type: none"> Develop insights to enhance e-services to customers Deliver proactive, user-friendly, responsive and integrated e-services Extend the reach of e-services 	<ul style="list-style-type: none"> Deliver clear and useful information online in a vibrant and interesting manner Attract participation in online public consultations and feedback 	<ul style="list-style-type: none"> Create synergy through shared data, processes & systems Enrich public officers' work experience through innovative use of infocomm Foster innovative exploitation of infocomm in public sector 	<ul style="list-style-type: none"> Enhance economic competitiveness through sectoral transformation Collaborate with infocomm industry in iGov solutions Showcase and promote iGov solutions
Key Enablers	Infocomm Management and Governance			
	Public Sector Infocomm Competency Development			
	Infocomm Security and Infrastructure			

Figure 3-1: Strategic Framework for iGov2010

Increasing Reach and Richness of e-Services

About 1,600 services are already available online. The Government's next focus is on how to take these e-services, in particular their adoption, reach and quality, onto a higher plane. We will concentrate on improving the building blocks of managing customer relations – customer insights, service offerings and customer interactions.

Develop Insights to Enhance e-Services to Customers

Today, the Government is at a stage where to enable service transformation, there is a need to gain deeper insights into our customers' needs and preferences, so as to better serve them.

While the Government has the information, this is scattered through its many agencies in a plethora of files. To put together this jigsaw puzzle, the Government will leverage infocomm to put in place relationship-building systems across the Government. These systems will help the Government understand the customers' usage patterns. The intent is to anticipate the needs and expectations of the various customer groups, be it youth, senior citizens, overseas Singaporeans or businesses.

Specifically for businesses, the Government will issue a unique identification number for each establishment that it registers or licenses. Besides business establishments, representative offices, charities, clubs, associations, societies, non-profit

organisations can also use their own number for simpler, faster and easier interactions with public agencies.

Basic non-confidential information on these establishments can also be shared more effectively across public agencies that serve them. This will lead to the efficient delivery of more customised Government services for all entities.

With a better understanding of the needs and preferences of its customers, the Government can better deliver proactive and responsive e-services that are reliable, user-friendly and integrated.

Deliver Proactive, User-friendly, Responsive and Integrated e-Services

The My.eCitizen portal, where customers can opt in to receive prompts about relevant e-services from both the public and private sectors via SMS or e-mail, will be revamped. It will offer new features, such as a one time log-in to access all e-services. It will also display recent and past interactions with the Government.

A new My.eBusiness portal will be set up for enterprises. It will deliver information and e-services that are personalised to businesses, such as financial management, market information and private sector e-services. It will be developed in partnership with the private sector.

New mobile services will be designed that take advantage of the technologies made possible by the Next Generation National Infocomm Infrastructure. Customers will be able to transact with the Government 24/7, on the go. This will come in handy when reporting incidents involving the environment and security. To make it even more convenient, customers need to remember just one SMS number and enter their message to the Government in only one SMS message format.

Extend the Reach of e-Services

To extend the reach of Government e-services, a two-pronged approach is planned – firstly, improve the accessibility of the Government's e-services and secondly, raise customers' awareness of these e-services.

The first prong leverages Singapore's high mobile phone penetration rate of more than 100 per cent to deliver more convenient access to Government services to our customers. This will

be an effective way of extending e-services to the mobile users, some of whom would not have used Government e-services if they were not available on the mobile channel.

The Government has already rolled out several mobile services. One example is the Central Provident Fund's mPAL that allows CPF account holders to check their personal CPF information using a mobile phone.

Citizens with no access to the Internet at home or are apprehensive about using e-services can turn to the CitizenConnect centres at various community clubs around the island. Here, dedicated service staff will be at hand to provide assistance with e-services at the terminals. Similar services for enterprises will be piloted at privately-run BizHelper centres.

Concurrently, the Government will embark on publicity campaigns to raise public awareness of e-services. This will bring the general public's attention to the diverse range of e-services that are available at their convenience.

Increasing Citizens' Mindshare in e-Engagement

Connecting with citizens involves the strengthening of Government-citizen relations, and engaging them as an integral part of the process of formulating public policies.

The Government recognises that in this area, infocomm is only an enabler. The focus is on how infocomm can support the Government's overall efforts in engaging citizens, specifically in providing public information, supporting public consultations and gathering citizens' feedback.

Deliver Clear and Useful Information Online in a Vibrant and Interesting Manner

The Singapore Government Online (www.gov.sg) portal will have an improved look-and-feel, better content search facilities, and most importantly, clearer presentation of information on Government policies, programmes and services. Illustrations and bite-size video snippets can be used to bring across messages in a more vivid manner.

For example, cartoon depiction of public policies may be better understood and more appealing to the masses than lengthy pages of policy rationale and implications. Similarly, answers to Frequently-Asked-Questions are likely relevant to all visitors to the portal and should be readily accessible.

All Government websites will also adopt the Singapore Government Metadata Standards for consistency in the categorisation of information. This will make it easier for people to search for Government information online.

Attract Participation in Online Public Consultations and Feedback

Public consultation creates two-way communication between Government and citizens. The Government facilitates the communication through e-consultation papers, e-polls, discussion forum and replies to feedback on the Government Consultation Portal. Leveraging on the Internet, the portal allows the consultation net to be cast further to include citizens anywhere in the world. It also taps on the pool of 5,000 feedback contributors on the People's Forum.

The portal will be enhanced to include a Government-to-Business Consultation space and an Overseas Singaporeans Portal. This allows the Government to better engage the business community and overseas citizens respectively.

The Government will also continue to raise awareness of this e-channel as a means of voicing views and providing feedback through publicity and education campaigns.

These efforts will complement non-electronic citizen engagement efforts to move the Government-citizen relationship to the next level – active citizen engagement in the policy-making process.

Enhancing Capacity and Synergy in Government

As part of the process of creating an efficient, responsive and integrated Government, there will be three key strategies:

Create Synergy through Shared Data, Processes and Systems

Changes in structural and business processes will be needed to support seamless sharing across public sector agencies. Infocomm technology will be used to enable the sharing of data, processes and systems. More inter-agency collaborations and sharing will create synergies and enhance the Government's capacity.

Paving the way to greater efficiencies is the Singapore Government Enterprise Architecture, a blueprint that systematically identifies business areas where public agencies can collaborate with one another. It will also set data and application standards. These standards will facilitate the sharing of information and systems across public agencies.

A Standard Operating Environment will be implemented in which every public officer will operate under a standard desktop, network and messaging environment. Such a system will be easier to operate and maintain. When deployed to all public agencies, the cost savings is expected to be significant.

The consolidation and provision of common finance and human resources services to public agencies through the newly-launched Centre for Shared Services – VITAL.org will also bring about greater economies of scale for the public sector.

A common applications platform will also be created to facilitate the sharing of applications within the Government. The platform will provide the necessary infrastructure and tools for public agencies to develop and share application systems with other public agencies.

Enrich Public Officers' Work Experience through Innovative use of Infocomm

In a creative economy, public officers are the most important assets of the Government. For this reason, the Government is seeking ways to use infocomm to create solutions that address the common work challenges faced by its employees. Some of these challenges include information overload and the need to constantly keep their skills relevant and up-to-date. The Government needs to transform the way public officers work to enhance their work capacity. This will lift the overall productivity in the public service.

Under this strategy, the Government will develop a technology showcase to help the public service conceptualise and visualise new tools for public officers. For instance, use of information assistants and knowledge discovery tools will help public officers manage information overload. Another example is the use of mobile technologies beyond the laptop to truly liberate public officers from their desks and allow them to work seamlessly from anywhere.

The Government will also continue to build on the vision of a knowledge enterprise and implement initiatives to enable public officers to be more productive, efficient, effective and responsive. One possibility is the development of a virtual employee workspace with the necessary tools to facilitate collaboration and knowledge-sharing across public agencies.

Foster Innovative Exploitation of Infocomm in Public Sector

The Singapore Government has built a reputation for being a leading adopter of innovative technologies over the last 25 years. Moving forward, the intent is to enhance the public sector's capacity to generate new ideas and use infocomm innovatively.

While the Government's infocomm investments continue to be measured by tangible benefits and outcomes, this strategy ensures that the Government does not neglect the need to constantly experiment with emerging technologies in our continuous pursuit of better service to our citizens and customers.

To support this strategy, the Government will continue to set aside funds for trials of new technology or innovative ideas by the agencies. Regular forums will be held where participants share their experiences in creative implementation of infocomm. Such forums will facilitate the cross-pollination of ideas between agencies, and between the public and private sector.

Enhancing National Competitive Advantage

iGov2010 will create a strategic competitive advantage for Singapore. At the industry level, public-private partnerships in innovative projects will boost the growth of the private sector and in particular the infocomm industry. At the national level, iGov2010 seeks to foster a pro-business environment that attracts investments to Singapore. In the international arena, it also offers potential to accelerate economic growth and promote Government-to-Government collaborations.

Together, these will strengthen Singapore's global position as one of the best environments for businesses and anchor more businesses to Singapore.

Enhance Economic Competitiveness through Sectoral Transformation

Public agencies play an important role under the iN2015 masterplan in supporting the transformation of economic sectors with infocomm.

For instance, TradeXchange will be an integrated infocomm platform with a single web interface to all trade-related infocomm systems. Its purpose is to facilitate the exchange of commercial and regulatory data throughout the entire trade and logistics value chain.

Here, public services such as customs declarations and applications for permits will be integrated with private sector offerings such as financial services and insurance. This will further simplify the nationwide trade permit declaration system and provide the trade and logistics community with a total customer service experience.

Other similar projects involving the public and private sectors have also been mapped out under the iN2015 plan in education, healthcare and other areas.

For instance, the EdVantage programme seeks to enable pervasive use of infocomm in educational institutions to enhance the learning experience. This includes providing personalised infocomm devices to students and catalysing the development of learning applications and content.

Healthcare services will be more personalised and integrated with the deployment of initiatives such as the Health Information Exchange and Integrated Healthcare Continuum. Among other capabilities, the former will enable the exchange of healthcare data across healthcare providers and the latter will enable patients with chronic diseases to manage their health at home, assisted by infocomm.

Collaborate with Infocomm Industry in iGov Solutions

To increase the private sector's involvement in iGov2010 projects, public agencies will collaborate with the infocomm industry in the co-creation, development and export of iGov solutions.

Where feasible, the Government will also release the relevant intellectual property rights of solutions and systems that the industry wants to market abroad, and contribute domain expertise to support their commercialisation.

These efforts will help the local companies expand overseas and raise the profile of "Made-by-Singapore" products and services, two of the goals of the iN2015 Enterprise Development Sub-Committee.

There has already been some success in exporting our infocomm solutions. A local firm has secured a five-year US\$20 million contract to reproduce the import-export documentation feature of its TradeNet system for Saudi Arabia. The system has its origins as the world's first electronic trade documentation system that instantaneously approves permit applications. It increased the Singapore Customs efficiency and lowered business costs for the trading community.

Showcase and Promote iGov Solutions

The Government will build on Singapore's reputation as a centre of excellence to actively showcase and promote Singapore iGov expertise and solutions to the world. Visitors will learn more about the infocomm solutions implemented by the Singapore Government. The expertise of local infocomm companies will also be showcased through these solutions.

We will also explore ways for Singapore to take on a greater leadership role among like-minded countries in the use of infocomm. For example, Singapore can lead in the development of cross-border infocomm initiatives with neighbouring countries.

Key Enablers

There are three enablers that cut across and support all the four thrusts in iGov2010 – Infocomm Management and Governance, Public Sector Infocomm Competency Development and Infocomm Security and Infrastructure.

These areas have received considerable attention in the earlier e-Government action plans and will continue to be the building blocks to making the iGov2010 vision a reality.

Infocomm Management and Governance ensures the proper deployment of the iGov2010 plan and efficacy in the use of public funds for infocomm initiatives. It covers the set up of committees and appointment of strategy owners to ensure the smooth implementation of the overall plan and specific programmes under each strategy. It also looks into areas to help public agencies better manage their infocomm investments. For instance, best practices such as portfolio and risk management methodologies will be promulgated throughout the public sector.

Public Sector Infocomm Competency Development looks at organising courses and seminars for public officers to equip them with the skills to appreciate, understand and implement the iGov2010 initiatives. An iGov Competency Framework will be developed to map out what public officers need to know.

Infocomm Security and Infrastructure is an essential component that the rest of the plan depends heavily upon. In the area of Infocomm Security, the Government has formulated the National Authentication Framework and the Infocomm Security Masterplan. The first is a unified solution that examines the issue of digital authentication of identity across the public, private and people sectors. The goal is to create a model that addresses the privacy and identification needs of all three sectors and yet, is convenient and easy to use. The second prepares the Government for cyber attacks and raises the security level of the country's infocomm infrastructure and services.

During the course of the iGov2010 plan, the Government will also be working to implement a Standardised Operating Environment. This initiative will standardise the computer desktop, network and messaging services across agencies. It allows for central control of infocomm assets and the management of security policies, ensuring the nimbleness and security of the infocomm environment that supports Government functions.

CHAPTER 5

CONCLUSION

The Government would like to invite you to explore for yourself what the iGov2010 vision and strategies mean to you – as a consumer of Government services, a citizen, a public employee and an industry player. We suggest that:

- As a customer, whether as an individual or business, you go one step beyond transacting with the Government electronically to provide feedback on e-services. Your feedback will help us improve the quality of Government e-services. You can also advocate the use of e-services to your family, friends and associates. This will help ensure that more people can benefit from the convenience of online Government services.
- As a citizen, you use and assess the quality of information on Government websites and suggest ways that the Government can improve in this area. You can also participate in the formulation of public policies during e-consultations by sharing with us your views. In addition, you can give us feedback on existing policies and services via Government websites and mobile channels to help us improve them.
- As an industry player, your company proposes business areas that the Government and your company can collaborate on. You can also participate in the co-creation of iGov solutions.
- As a public employee, you adopt a customer-centric mindset and a consultative approach to policy formulation. You can lead or participate in the sharing of knowledge, systems and data within your agency, and with other public agencies. You can also come up with innovative ways to deliver better public services to your customers.
- As a public agency, you spearhead efforts to integrate services with related public agencies, partner with the private sector by releasing your intellectual property rights and arrange for your employees to contribute domain expertise.

ANNEX A: e-Government Action Plan (2000 – 2003) and e-Government Action Plan II (2003 – 2006)

Vision of e-Government Action Plans

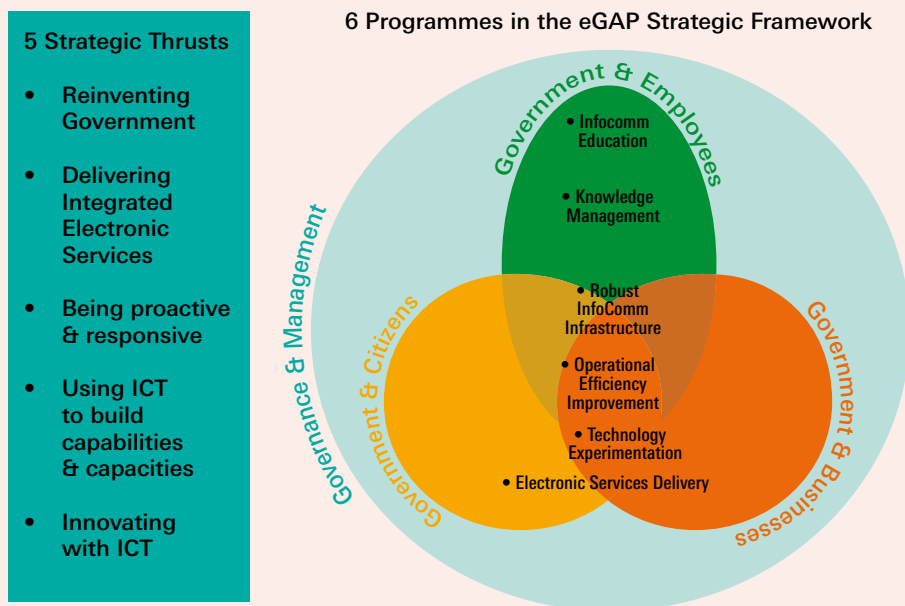
The goal of the two e-Government Action Plans was “To be a leading e-Government to better serve the nation in the digital economy”.

e-Government Action Plan (2000 - 2003)

The first e-Government Action Plan was centred on three critical relationship dynamics:

- Government and Citizens
- Government and Businesses
- Government and Employees

To move these three critical sectors towards the e-Government vision, the e-Government Action Plan prescribed the broad directions of infocomm deployment with five strategic thrusts and six programmes.



e-Government Action Plan II (2003 – 2006)

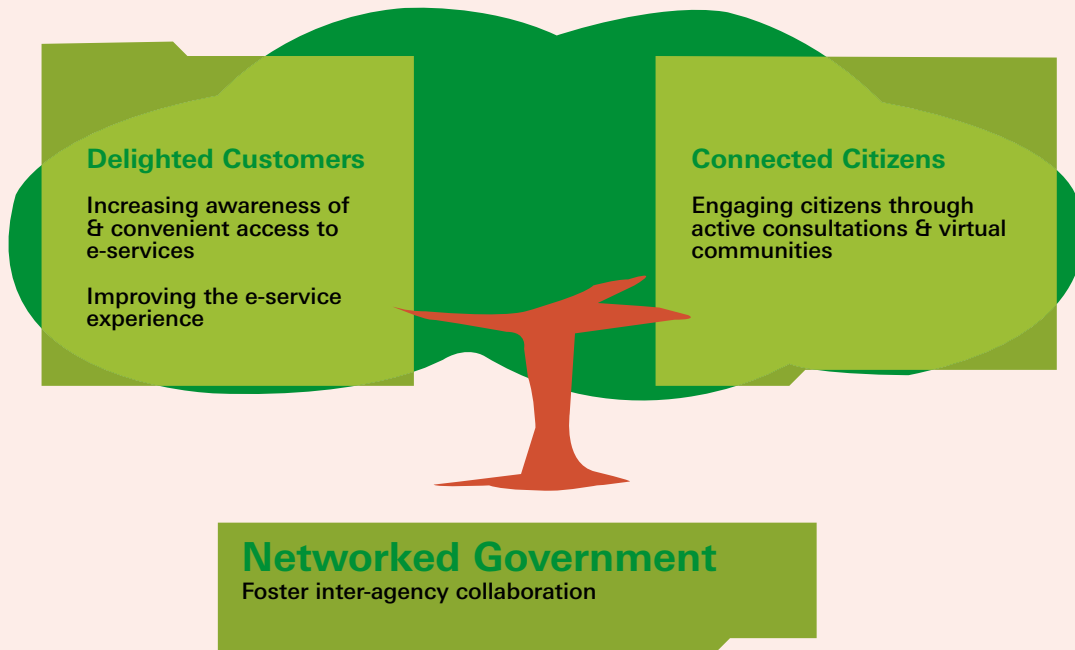
Building on earlier efforts in the first e-Government Action Plan, the second plan focused on the transformation of the public service into a Networked Government that delivers accessible, integrated and value-adding e-services to customers; and helps bring citizens closer together.

eGAP II sought to achieve three distinct outcomes:

- Delighted Customers
- Connected Citizens
- Networked Government

eGAP II Strategic Framework

Strategies to Realise the Vision & Outcomes



Annex B: Accolades and Key Achievements of the e-Government Action Plans

Building on the success of the Government's computerisation efforts, the first e-Government Action Plan (eGAP) was conceived and launched in 2000. eGAP put all 1,600 key public services that were suitable for electronic delivery online by 2003. It laid the foundation for the e-Government Action Plan II (eGAP II).

Addressing the needs of a more challenging environment, eGAP II adopted strategies to support the plan's three key outcomes of Delighted Customers, Connected Citizens and Networked Government.

Today Singapore is ranked highly as a leading e-Government in international benchmarking studies. Our innovative efforts in using infocomm technology have garnered us local and worldwide accolades and awards. More importantly, our citizens continue to express satisfaction with the standard of e-services delivered to them.

International Accolades and Awards

We have won numerous international accolades and awards over the past few years.

- Singapore topped the e-Government indices of the World Economic Forum's Networked Readiness Index five years in a row (2002-2006). We were also ranked 1st and 2nd for overall Networked Readiness in 2005 and 2006 respectively.
- Singapore is consistently ranked amongst the top 3 e-Governments in Accenture's annual global e-Government Report (2000-2005).
- Singapore is one of the strongest e-Governments in the United Nations. In the United Nations' 2005 e-Government Readiness Report, our ranking in both the e-Government Readiness Index and e-Participation Index improved from the 8th and 4th positions in 2004 to 7th and 2nd respectively in 2005.
- Our e-Government solutions have won numerous awards, including the Intelligent Enterprise Asia Awards in 2004 for the Trademarks System, the CIO Honouree Award in 2005 for the Integrated Case Management System for child protection and rehabilitation officers and psychologists, and the 2005 United Nations Public Service Award for the Online Business Licensing Service.

- We won our 2nd Stockholm Challenge Award (2004) for the Access to Archives Online, a portal that enables seamless access to heritage materials from the National Archives of Singapore.
- Our eCitizen Portal and Public Service Infrastructure (PSi) projects have won numerous awards such as the Stockholm Challenge award (2002) and the Intelligent 20 Award (2002).

Delighted Customers

Based on the e-Government Customer Perception Survey, conducted in March 2006 (for year 2005),

- 86 per cent of customers who needed to transact with the Government in the past 12 months had done so electronically at least once; and
- 85 per cent of customers expressed satisfaction with the overall quality of e-services delivered.

Today our customers enjoy convenient, intuitive and easy-to-use e-services. In particular, new cross-agency integrated e-services have brought greater convenience to them by reducing the number of interactions with different public agencies needed to complete their transactions with the Government.

Citizens can interact online with the Government on a vast range of issues 24 hours a day, seven days a week. The eCitizen Portal, www.ecitizen.gov.sg, provides a single access point to Government information and services. The portal is organised into intuitive categories for easy access. For the more sophisticated customers, My.eCitizen allows them to customise frequently-accessed e-services on a personalised homepage, subscribe to desired services and receive SMS or email alerts.

For the business community, transacting online with the Government is becoming the norm. Having easy and convenient online access to Government agencies at all times translates to savings in time and money for businesses.

The EnterpriseOne portal, www.business.gov.sg, is the first entry point for all local and international businesses. It offers access to a full suite of aggregated and integrated information and services useful to businesses. For easy navigation, e-services are presented according to business and industry topics. Pertinent topics such as Government assistance programmes, intellectual property rights and market research provide useful information to businesses.

Underlying the success of these portals is the Public Service Infrastructure (PSI), a central facility that allows quick and efficient deployment of e-services.

Common features have also been progressively deployed to support e-service delivery. SingPass, or Singapore Personal Access, makes it more convenient and easier for users to transact online with the Government with just one identification and password. All Singapore residents above the age of 15, employment pass holders and their dependents are eligible for SingPass.

To enhance confidence in our e-services, the Government has also adopted good infocomm practices like TrustSg to give customers the assurance that public agencies' practices are as good as private sector benchmarks.

Connected Citizens

Citizens can obtain explanations of all public policies and the rationale for these policies online. They also have the option of using the e-channel to provide feedback to the Government during the policy formulation and policy review processes.

Launched in April 2003, the Government's Online Consultation Portal, www.feedback.gov.sg, is a one-stop destination for citizens to give views on policy proposals by the Government. This Portal supports e-polling and provides references to related policies so as to enable citizens to better understand public issues. The public can comment on ministry-specific policy consultation papers via the e-consultation channel or debate with fellow citizens on a wide range of current issues in the discussion forum.

Besides encouraging active involvement of citizens in policy-making and review processes, other e-Government efforts include initiatives to foster greater bonding within different communities like the youths.

For example, the Youth Portal, Youth.sg, provides a first stop resource portal for community participation and a virtual space for young Singaporeans who want to make a difference to the people around them. Youth.Sg offers young Singaporeans an avenue to gain access to information on how to get started on their own community activities, as well as to find out about the initiatives their fellow youth are engaged in.

Networked Government

Within the Government, our public agencies have adopted guidelines and best practices like portfolio management and project risk management to ensure better management of infocomm projects.

To facilitate inter-operability between Government systems, agencies refer to the Service-Wide Technical Architecture, a set of technology standards and best practices when constructing their systems.

In the area of Infocomm Security, the Government has developed the Infocomm Security Masterplan to secure the people, private and public sectors against growing threats such as cyber terrorism, hacking and virus attacks. The plan, launched in February 2005, also looks into the development of national capabilities, enhancement of security technology research & development, and improvement of the resilience of critical infocomm infrastructure.

Today, our public agencies are at varying degrees of maturity in Knowledge Management. The number of public agencies which have identified and developed implementation roadmaps of the critical knowledge resources to support their agency's key business processes has doubled since the start of the programme.

Various intra- and inter-agency initiatives have also been developed to facilitate systematic and coherent information dissemination within the public service. Communities of Practices and dedicated teams also share collective knowledge as well as promote and drive knowledge-sharing in the public service.

Annex C: Acknowledgements

iGov2010 tapped on the collective wisdom of the public service. Officers from all levels of Government and representing a wide cross-section of the public service assisted in the development of iGov2010. Customers, citizens and representatives from the private sector also provided valuable feedback that was incorporated into iGov2010.

We thank the following agencies and individuals. Whether in providing strategic direction or participating as a member of a working team, iGov2010 has benefited from their contributions.

Project Core Team

The Project Core Team was responsible for staffing the Project Steering Committee and putting together all the elements of iGov2010. It comprised:

From the Infocomm Development Authority of Singapore

Name	Designation
Mr Tan Eng Pheng (Project Director until 31 Oct 05)	Director e-Government Planning & Management
Ms Tan Kar Joo (Project Director from 1 Nov 05)	Director e-Government Policies & Programmes
Ms Cheng Pei Shih (Project Manager)	Assistant Director e-Government Policies & Programmes
Ms Emily Teo	Senior Consultant e-Government Policies & Programmes
Ms Tan Kwee Ngim	Senior Consultant e-Government Policies & Programmes
Mr Eddie Liew	Consultant e-Government Policies & Programmes
Mr Toh How Meng	Consultant e-Government Policies & Programmes
Mr Yeo Yaw Shin	Associate Consultant e-Government Policies & Programmes

From the Ministry of Finance

Name	Designation
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From the Public Service Division, Prime Minister's Office

Name	Designation
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Extended Project Team

Together with the Project Core Team, the Extended Project Team played a critical role in fleshing out the strategies, programmes and projects. It comprised:

For Strategic Thrust: Increasing Reach and Richness of e-Services

Name	Designation
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Ms Jennifer Lin	Manager Corporate Planning Inland Revenue Authority of Singapore
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For Strategic Thrust: Enhancing National Competitive Advantage

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For Key Enablers

Name	Designation
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Further Acknowledgements

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- The Permanent Secretaries and other public sector leaders who shared their insights and views on the key priorities and critical success factors of the new Plan;
- The Chief Information Officers and Directors (Planning) who participated in brainstorming workshops by contributing their ideas for the key programmes and projects; and
- All those who contributed in one way or another in the public sector-wide IT masterplanning exercise.

Ministry of Finance

The Ministry of Finance seeks to advance the well-being of Singapore through Finance. The Ministry strives to achieve a secure Singapore, a balanced budget, a best for business approach, an excellent public service and a world-class MOF. To deliver excellent public service, MOF works with the Government Chief Information Office of the Infocomm Development Authority of Singapore (IDA) and all public sector agencies to exploit infocomm technologies to improve efficiency and transform the way services are delivered to the public. It oversees the implementation of the e-Government Action Plans I and II to realise our e-Government vision. With iGov2010, MOF will guide public agencies to reap synergies and explore new opportunities as an integrated Government.

For more information, visit www.mof.gov.sg

Infocomm Development Authority of Singapore

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